

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 91-158
NPDES NO. CA0029076

WASTE DISCHARGE REQUIREMENTS FOR:

CITY OF SANTA CLARA
ELECTRIC DEPARTMENT
GIANERA POWER PLANT
SANTA CLARA, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. The City of Santa Clara, Electric Department (hereinafter called the discharger) submitted a Report of Waste Discharge, dated July 3, 1991, and applied for reissuance of a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES), from the facility located at 2339 Gianera Street.
2. The discharger generates electric power with two natural gas-fired combustion turbines to meet peak load power demands in the City of Santa Clara. Distillate oil is used as an emergency backup fuel and is stored at the facility in a 100,000-gallon above ground tank. The tank is located within a 6-foot high concrete dike. Drainage within the diked area, and from a concrete loading pad adjacent to the diked area go to a sump connected to a gravity oil/water separator. Treated effluent from the oil/water separator is discharged to the facility storm drain system. The storm drain system consists of a series of 13 drop inlets as shown in the attached Figure 1. The size of the facility is approximately 8.5 acres, of which approximately 5.5 acres are impervious surface.
3. The discharge, designated as Waste 001, consists of stormwater runoff from the facility, and oil/water separator effluent from runoff from the diked area and loading pad area. (Currently, treated tank bottom bleedoff water from the fuel storage tank is also discharged to the storm drain system. This Order prohibits discharge of this wastewater source.) The discharge flows offsite into the City's storm drain system, specifically to a storm drain pump station which discharges to San Tomas Aquino Creek, at a point Lat. 37°24'00", Long.

121°58'00". San Tomas Aquino Creek is a tributary to Guadalupe Slough and South San Francisco Bay, all waters of the United States.

4. The discharge is presently governed by the requirements of Waste Discharge Requirements Order No. 86-76, adopted by the Board on October 15, 1986. The conditions of Order No. 86-76 were continued in effect past its October 14, 1991 expiration date, in accordance with EPA regulation 40CFR122.6(d), by letter of the Executive Officer, dated October 11, 1991.
5. The U.S. Environmental Protection Agency (EPA) and the Board have classified this discharge as a minor discharge.
6. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 16, 1986. The Basin Plan contains water quality objectives for South San Francisco Bay and contiguous waters.
7. The beneficial uses of San Tomas Aquino Creek, Guadalupe Slough and South San Francisco Bay are:
 - a. Water contact recreation
 - b. Non-contact water recreation
 - c. Wildlife Habitat
 - d. Estuarine Habitat
 - e. Preservation of Rare and Endangered Species
 - f. Shellfish Harvesting
 - g. Commercial and Sport Fishing
 - h. Fish Migration and Spawning
 - i. Industrial Service Supply
 - j. Navigation
8. Effluent limitations and toxic effluent standards established pursuant to Section 301, 304, and 307 of the Clean Water Act and amendments thereto are applicable to the discharge.
9. The action to adopt an NPDES permit is exempt from the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), in accordance with Section 13389 of the California Water Code.
10. The Board has notified the discharger and interested agencies and persons of its intent to reissue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

11. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT the City of Santa Clara, Electric Department, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The discharge of wastewater other than those identified in Finding 3 of this Order, such as tank bottom bleedoff wastewater, or wastewater from tank washing and associated pipe flushing operations, is prohibited.
2. The discharge of stormwater runoff from the facility that causes or contributes to the violation of Receiving Water Limitations is prohibited.
3. The discharge of chemicals, solvents or products of petroleum origin to waters of the State is prohibited. Any spills of such materials shall be promptly cleaned up and prevented from mixing with precipitation runoff which discharge into waters of the State.
4. Bypass or overflow of untreated wastewater from the oil storage area to waters of the State is prohibited.

B. Effluent Limitations

1. The discharge of Waste 001 in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
Oil and Grease	mg/l	10	20

2. The pH of the discharge shall not exceed 8.5 nor be less than 6.5.

3. In any representative set of samples, the waste as discharged shall meet the following limit of quality:

TOXICITY:

The survival of Rainbow Trout test fish in an 96-hour static bioassays of the discharge shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for ten consecutive samples.

C. Receiving Water Limitations

1. The discharge shall not create a condition of nuisance, nor adversely affect beneficial uses, nor cause any of the following conditions to exist in waters of the State at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. bottom deposits or aquatic growths;
 - c. alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge shall not cause a violation of any applicable water quality objective for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. The discharger shall comply with all sections of this Order immediately upon adoption.
2. In order to prevent or minimize the potential for the release of toxic substances or other materials deleterious to water quality to waters of the United States, through runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage, the discharger shall comply with the following:
 - a. By March 1, 1992, the discharger shall submit to the Executive Officer for approval a revised Emergency Response Plan or an addendum to the discharger's Emergency Response Plan (August 1990) which addresses the following stormwater pollution prevention aspects:
 - i) Chemical use, specifically pesticide and herbicide use, practices at the facility; and
 - ii) staff training on stormwater pollution prevention practices.
 - b. Thereafter, the discharger shall review and update annually its Emergency Response/Stormwater Pollution Prevention Plan. The discharge of pollutants in violation of this Order where the discharger has failed to implement the conditions of the Plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
3. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.
4. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December 1986, except items A.11, A.18, B.1, B.2, B.3, C.8, and C.11.
5. All applications, reports, or information submitted to the Regional Board shall be signed and certified pursuant to Environmental Protection Agency regulation (40 CFR 122.41K).
6. Pursuant to Environmental Protection Agency regulations [40 CFR 122.42(a)] the discharger must notify the Regional Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture of a pollutant not reported in the permit

application, or (2) a discharge of a toxic pollutant not limited by this permit has occurred, or will occur, in concentrations that exceed the specified limits.

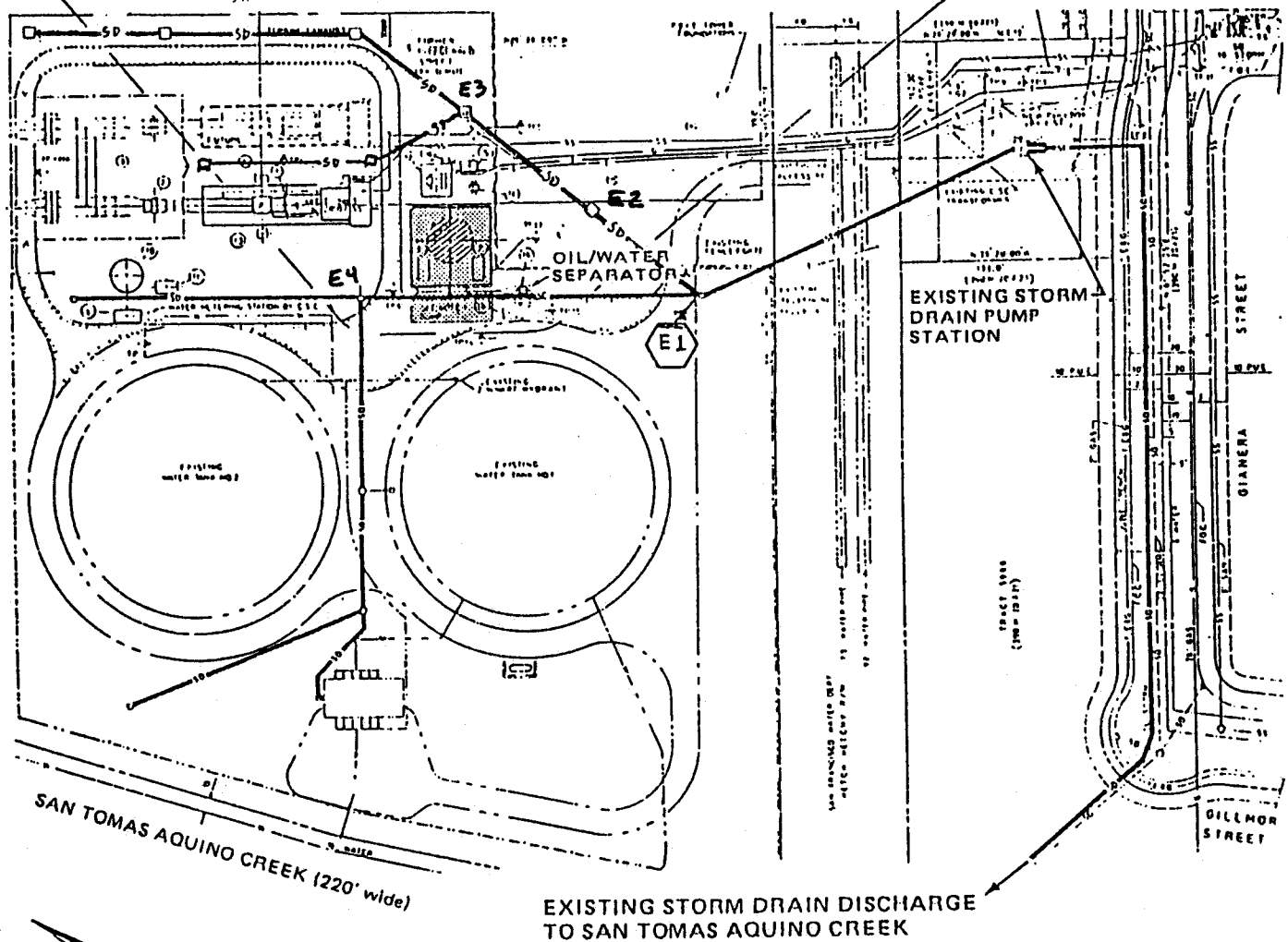
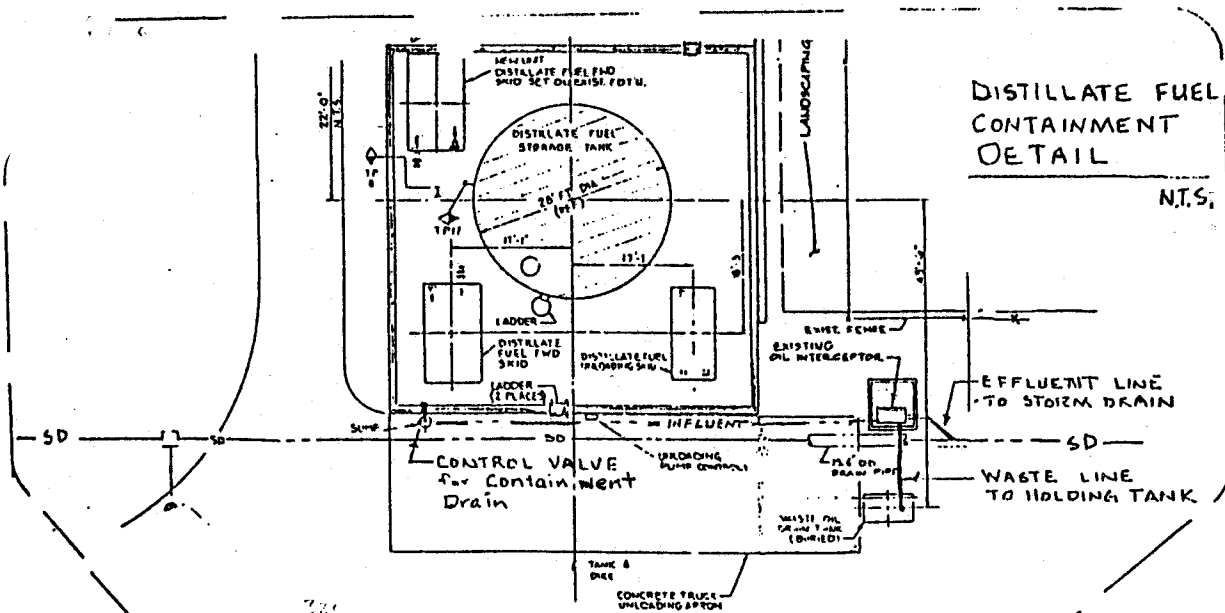
7. This order expires on November 20, 1996. The discharger must file a report of waste discharge in accordance with Title 23 of the California Code of Regulations not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
8. This Order shall serve as National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act, or amendments thereto, and shall become effective upon the date of adoption, provided the Regional Administrator of the EPA, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.
9. Order No. 86-76 is hereby rescinded.

I, Steven R. Ritchie, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on November 20, 1991.



STEVEN R. RITCHIE
Executive Officer

Attachments:
Standard Provisions, Reporting Requirements
& Definitions - December 1986
Self Monitoring Program
Facility Map



Source:

CITY OF SANTA CLARA ELECTRIC DEPARTMENT

NPDES No. CA0024076

Order No. 91-

GIANERA POWER PLANT
2339 Gianera Street
Santa Clara, CA 95050

LOCATION OF STORM DRAIN SYSTEM
AND DISCHARGE POINT

Figure 1

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

CITY OF SANTA CLARA
ELECTRIC DEPARTMENT
GIANERA POWER PLANT
SANTA CLARA

NPDES NO. CA0029076

ORDER NO. 91-158

CONSISTS OF

PART A, dated December 1986

AND

PART B

SELF-MONITORING PROGRAM
PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At any point in the outfall between the point of discharge and the point at which all waste tributary to that outfall is present.

II. AMENDMENTS TO PART A

- A. Delete sections D.1, D.3, E.4, E.5, F.3, F.4, and F.5.
- B. G.4 Self-Monitoring Reports are due quarterly and shall include data for a calendar quarter by the forty-fifth day of the following quarter.
- C. G.5 Annual Reporting is amended to read as follows: Annual reports are due by August 15 of each year. The discharger shall submit an annual report to the Regional Board covering the previous 12 months (July to June). The report shall contain tabular and graphical summaries of the monitoring data obtained during the 12-month period. In addition, the report shall contain a comprehensive discussion of the compliance record particularly in the area of compliance with the receiving water limitations.

III. SCHEDULE OF SAMPLING AND ANALYSIS

A. Stormwater Discharge


The schedule of sampling and analysis shall be that given in Table I.

I, Steven R. Ritchie, Executive Officer, here by certify that the foregoing Self-Monitoring Program:

- 1. Has been developed in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 91-158.
- 2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

Effective Date: 8/20/91


STEVEN R. RITCHIE
Executive Officer

Attachments: Table I

TABLE I
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS
NPDES PERMIT NO. CA0029076
ORDER NO. 91-158

Sampling Station	E-001					
TYPE OF SAMPLE	G	O				
Flow Rate, gpm	M ⁽¹⁾					
pH, units	M					
Temperature, °C	M					
Oil and Grease, mg/l	M					
Toxicity, % survival in waste as discharged	Y					
All Applicable Standard Observations		M				

LEGEND FOR TABLE

Types of Samples

G = grab sample
O = observation

Types of Stations

E = waste effluent stations

Frequency of Sampling

M = once each month. The sample shall be taken from the first storm event from that month when ever possible.

Y = once each year. The sample shall be taken from the first discharge after September 1st of each year whenever possible. The test species used shall be Rainbow Trout.

Notes

- ⁽¹⁾ The flow rate is based on an instantaneous flow measurement taken at the time of sample collection. If there is any violation of permit effluent limits, the discharger shall also report the total volume of stormwater discharged from the facility during the period of the violation. The total volume may be calculated from an appropriate site runoff coefficient and precipitation records, or measurements.